

Subject: Anatomy of the nervous and skeletal systems

I. General information

Organization unit	Faculty of Rehabilitation Chair: Chair of Physiotherapy Fundamentals Supervisor: dr hab. prof. AWF Katarzyna Kaczmarczyk
Course name	Anatomy of the musculoskeletal and nervous systems
Subjectcode	Fv-13
Teachinglanguage	English
Type of subject (obligatory/ facultative)	obligatory
Level of studies (eg.bachelor, master)	Master (linear)
Study year	I
Semester	I
ECTSpoints	2
Teacher	dr Anna Cygańska, anna.cyganska@awf.edu.pl
Studies program in which the subject is realized	PHYSIOTHERAPY
Method of realization (stationary/ distance learning)	stationary
Prerequisites	Before starting the course, the student has knowledge, skills and competences in the field of BIOLOGICAL SCIENCES on the topography, structure and functions of basic tissues of the human body

II. Detailed Information

Course aims and objectives

A1	To familiarize the student with the proper structure of the human musculoskeletal and nervous systems and their functions, which is the basic condition for the implementation of tasks in the field of medical subjects related to the pathology of various systems.
A2	Familiarizing the student with scientific - English and basic Latin - anatomical terminology, the acquisition of which will allow the use of specialist literature and facilitate understanding of medical terms.
A3	Shaping the student's attitude to: - actively broaden the knowledge of normal human anatomy; - beliefs about the importance of knowledge of anatomy in the practice of an occupational therapist;

Learning outcomes

Learning outcome	Subject's learning outcomes
Knowledge	
K_W01 K_W02	<p>Student:</p> <ol style="list-style-type: none">1. Uses the correct and unambiguous nomenclature to describe parts of the human body, organs and tissues.2. Correctly defines the axes and planes of the human body3. Classifies and presents the structure of bones and types of bone connections.4. Describes bone structures and the structure of axial skeleton connections.5. Describes the bone structures and the structure of connections of the skeleton of the upper limb.6. Describes the bone structures and the structure of connections of the skeleton of the lower limb.7. Knows the morphological structure of muscle tissue. He knows the structure of the muscle (features, type of work, types, shape of muscles, types of muscle contraction).8. Knows the function and topography of the head, torso and neck muscles.9. Knows the trailers, function and topography of the muscles of the upper limb.10. Knows the trailers, function and topography of the muscles of the lower limb.11. Presents the topography of basic muscles, identifies muscle groups in the superficial and deep system, and analyzes their collective action in straight movements (with particular emphasis on the muscles of the upper limb).12. Divides the nervous system into parts: central, peripheral and knows their functions.13. Knows the general structure of the central nervous system, spinal cord.14. Knows the general structure of the central nervous system, the brain.15. Knows the general structure of the peripheral nervous system with the division into spinal nerves (plexuses) and cranial nerves, together with the areas they supply.16. Knows the exact structure of the brachial plexus and indicates the individual ranges of innervation of long and short nerves.17. Knows general information and basic functions of the autonomic system.18. Knows the general structure of the central nervous system, brainstem.
Skills	
K_U01	<ol style="list-style-type: none">1. He knows the health and safety rules in the anatomical laboratory.2. Recognizes the axes and planes of the human body, presenting correctly defined movements.3. Correctly locates individual parts of the human body on a living subject.

	<p>4. Shows on the model, phantom, anatomical chart, individual parts of the human body, their morphotic elements and the course of structural elements of the anatomical system.</p> <p>5. Uses the correct anatomical terminology (English and basic Latin).</p>
Social Competences	
K_P16	<p>1. Thoroughly and reliably prepares for classes.</p> <p>2. Learns systematically and understands the need to constantly expand knowledge.</p> <p>3. Looks for sources of knowledge and uses them to deepen their own knowledge.</p>

Syllabuscontents

No	Title
Classes	
SC1	Introduction to general anatomical terminology. Body divisions (topographic and organ systems). Plan of the structure of the human body, axes and planes of the body. General characteristics of the locomotor system, division into the passive part (osteoarticular-ligament system) and the active part (muscular system). The division of the skeleton. General structure of the skull.
SC2	Structure and connections of the spine and thorax . Functions of the spine and chest.
SC3	Morphological and functional characteristics of the upper limb . Upper limb connections.
SC4	Morphological and functional characteristics of the lower limb . Lower limb connections.
SC5	Morphological basis of the muscular system. Muscles of the torso, head and neck.
SC6	Upper limb muscles: hoop and arm (topography, trailers, functions)
SC7	Upper limb muscles: forearm and hand (topography, trailers, functions)
SC8	Muscles of the lower limb (topography, general attachments, main / most important functions).
SC9	Team action of muscles. Muscle action in simple movements.
SC10	Introduction to neuroanatomy: general structure and function of the nervous system;
SC11	Central nervous system- spinal cord.
SC12	Peripheral nervous system - peripheral nerves.
SC13	Peripheral nervous system - cranial nerves and autonomic nervous system.
SC14	Central nervous system - structure of the brain stem and cerebellum.
SC15	Central nervous system - structure of the brain.

1 ECTS point = 30 hours students work (contact + self-study)

TYPES OF CLASSES	HOURS
Contacthours	30
Selfstudy	30
Total = 60hours = 2 ECTS	

Literature
<ol style="list-style-type: none"> 1. https://www.kenhub.com/ 2. Anatomical chapters from Kinesiology of the Musculoskeletal System: Foundations for Rehabilitation, Donald A. Neumann (Autor);